# **SC Basic Refresher Course (Including Transitional material)**

The SC EMT refresher course follows the guidelines and breakdown of the NSC EMT-Basic 24 hour Refresher. The 24 hour refresher course is a suggested "minimum" hour course. SC Authorized Training Institutions and SC approved IST Programs may add more hours to the course if needed.

Topic	Hours
Preparatory	1
Airway	2
OB, Infants, Children	2
Patient Assessment	3
Medical/Behavioral	4
Trauma	4
Elective	8
Total	24

All transition material identified in this document below may be a part of the minimum 24 hour course, or additional hours may be added, as needed, to cover the transition material.

Below is the breakdown of the full EMT 2009 course. The material considered as "transitional" material is presented in italics, along with the suggested time frames needed to cover the material.

### **Documenting the Transitional Material to the National Registry**

All Training institutions / IST Programs using the SC EMT Refresher / Transition Course to document a candidate's training to the National Registry must issue a Certificate of Course Completion to each candidate that contain the following information:

- ✓ NREMT Candidate's Name
- ✓ EMT Transition Course Completion Date
- ✓ The name of the sponsoring agency (Training Institution or IST Program)
- ✓ Signature of the sponsoring agency (Director, Training Officer, etc.)
- ✓ The following statement:
  - "Name of Candidate" has completed a state-approved EMT-Basic to Emergency Medical Technician (EMT) transition course.

### **SC EMT Transition Course Material**

Section Titles (Divisions) In Italics: Gap Analysis of NSC to 2009 Educational

Standards - Material that should be emphasized

with suggested time limits.

<u>Preparatory</u> Essential content 65 min / Supplemental content 15 min.

EMS Systems (Essential content 15min.)

Provide detailed discussion on patient safety issues, decreasing medical errors, & required affective/behavioral characteristics.

Research (Essential content 5min.)

Information on evidence based decision making

Workforce Safety & Wellness (Supplemental content 10min.)

Emphasize the difference between BSI & PPE, Discuss bariatric issues, neonatal isolettes & medical restraint.

Documentation (No transitional material)

EMS System Communication (Supplemental content 5min.)

Fundamental information about transferring patient care to incoming EMTs

Therapeutic Communications (Essential content 15min.)

Provide detailed discussion about improving communication with the patient.

Medical/Legal Issues (Essential content 30min.)

HIPPA (new content) provide state-specific discussion on privilege communication. Provide discussion on Living Wills (added) Surrogate decision makers (added) Civil & Criminal court cases (expanded)

Anatomy & Physiology (Essential content 60min.)

Provide more detailed discussion on the life support chain focusing on oxygenation, perfusion, and the cellular environment.

Medical Terminology (No transitional material)

Physiology (Supplemental content 45min)

Provide discussion on respiratory dysfunction & shock.

Life Span Development (Supplemental content 5min.)

(New content) Discuss application of fundamental knowledge of Life span development to patient assessment and management.

Public Health (Supplemental content 5min)

Discuss Role of Public health; Public Health Laws, Regulations, and guidelines; EMS Interface with Public Health.

Pharmacology

Principles of Pharmacology (No transitional material)
Medication Administration (Supplemental content 5min.)

Discuss the five rights of medication administration.

Emergency Medications (Supplemental content 10min)

**Asprin** 

# Airway Management, Respiration, and Artificial Ventilation

Essential content 115 min.

Anatomy & Physiology (No transitional material)
Airway Management (Essential material 30min.)

Provide a detailed discussion of airway anatomy, airway assessment and assuring a patent airway.

Respiration (Essential material 30min.)

Provide a detailed discussion of the anatomy & physiology of the respiratory system, pathophysiology of respiration, assessment & management of inadequate respiration & age-related variations in pediatric & geriatric populations.

Artificial Ventilation (Essential content 15min.)

Provide a detailed discussion in management of inadequate ventilation, Differences between normal & PPV, & age-related variations.

#### **Patient Assessment** Essential content 90 min.

Scene Size Up (Essential content 5min.)

Re-emphasis on scene safety

Primary Assessment (Essential content 20min.)

Emphasize new terminology. Provide a detailed discussion of Primary Assessment

History-Taking (Essential content 30min.)

Emphasize new terminology and detailed discussion of geriatric content.

Secondary Assessment (Essential content 15min)

Emphasize new terminology. Provide a detailed discussion of Secondary Assessment.

Monitoring Devices (Essential content 15min.)

**Pulse Oximetry** 

Reassessment (Essential content 5min.)

Discuss reassessment of vital signs.

# Medicine Essential content 205 min. / Supplemental content 20 min.

Medical Overview (Supplemental content 5min.)

Emphasize re-use of new terminology.

Neurology (Essential content 15min.)

New content: Detailed discussion of Stroke/TIA

Abdominal & Gastrointestinal Disorders (Essential content 30min.)

Provide a detailed discussion of the anatomy, assessment, & management of GI bleeding, peritonitis, ulcerative disease, & agerelated variations.

Immunology (Supplemental content 10min.)

New terminology – Anaphylaxis did not appear in the 1994EMT-B

NSC. Emphasize new terminology and geriatric information.

Infectious Diseases (Essential content 10min.)

Emphasize updated infectious disease information, i.e. MRSA & AIDS. Provide discussion on cleaning and sterilizing equipment & decontaminating the ambulance.

Endocrine Disorders (Essential content 10min.)

Provide a detailed discussion on diabetes.

Psychiatric (Essential content 15min.)

Emphasize new material on excited delirium and revised restraint techniques.

Cardiovascular (Essential content 60min.)

Emphasize anatomy, physiology & pathophysiology. Emphasize specific cardiovascular emergencies plus the addition of aspirin information for ACS.

Toxicology (Supplemental content 5min.)

Provide a detailed discussion on poison control information to include the addition of drugs of abuse.

Respiratory (Essential content 45min.)

Provide a detailed discussion on respiratory diseases.

Hematology (Essential content 5min.)

Give a brief discussion of sickle cell disease.

Genitourinary/Renal (Essential content 15min.)

Provide an increased level of detail for dialysis.

Gynecology (No additional time noted)

Provide a brief discussion of sexually transmitted diseases and PID.

Non-Traumatic Musculoskeletal Disorders (No transitional material)

Diseases of the Eyes, Ears, Nose, & Throat (No transitional material)

### **Shock & Resuscitation** Essential content 30 min.

Shock content was moved from trauma to emphasize the fact that it occurs in contexts other than trauma; the cardiac arrest information was moved from cardiology for the same reason; brief discussion on devices to assist circulation, although subject to local protocol; shock should be taught in a more comprehensive context rather than simply as a consequence of bleeding

<u>Trauma</u> Essential content 160 min. / Supplemental content 30 min.

Trauma Overview (Supplemental content 30min.)

Provide detailed discussion of the field triage decision scheme. Provide discussion of Shock

(Essential content 15min.)

Discuss the Identification & categorization of Trauma patients to include the National Triage Protocol.

Bleeding (No transition material)
Chest Trauma (Essential content 30min.)

Provide a detailed discussion in the physiology & pathophysiology of chest trauma

Abdominal & Genitourinary Trauma (Essential content 15min.)

Provide a detailed discussion in the physiology of Abdominal &
Genitourinary Trauma. Provide a detailed discussion of specific injuries such as closed, open & penetrating abdominal trauma.

Orthopedic Trauma (No transitional material)
Soft Tissue Trauma (No transitional material)

Head, Face, Neck, & Spine Trauma (Essential material 10min.)

Provide a detailed discussion on the A&P on the head, neck & face.

Emphasize the potential harm of hyperventilation.

Nervous System Trauma (Essential content 45min.)

Provide an increased emphasis on neurological assessment.

Special Considerations in Trauma (Essential content 45 min.)

Provide a detailed discussion on the added information to include:

Pregnant patients, Pediatric patients, Elderly patients, & Cognitive impairment.

Environmental Trauma (Environmental Emergencies) (No additional time)
Provide an increase level of detail on submersion, bites,
envenomation, diving injuries & radiation exposure.

Multi-System Trauma (No additional time)
Include increase level of detail a discussion of kinematics and blast injury.

# **Special Patient Populations**

Essential content 10 min. / Supplemental content 50 min.

Obstetrics (Essential content 10min.)

Provide a detailed discussion on the complications of pregnancy. Emphasize the terms and briefly discuss preeclampsia, eclampsia & premature rupture of membranes.

Neonatal Care (No transitional material)
Pediatrics (No transitional material)

However, please note the increased level of detail and extensive

content.

Geriatrics (Supplemental content 30min.)

Extensive, all new content.

Patients With Special Challenges (Supplemental content 20min.)

Provide a detailed discussion of added information: Elder abuse,
homelessness, poverty, bariatric, more technology dependant,
hospice, sensory deficit, homecare & developmental disabilities.

### **EMS Operations** Essential content 40 min. / Supplemental content 10 min.

Principles of Safely Operating a Ground Ambulance

(Essential content 10min.)

Provide a detailed discussion on the risks of emergency response & leaving the scene.

Incident Management (No transition material)

However; ICS & Federal requirements have been added.

Multiple Casualty Incidents (Essential content 10min.)

Emphasize the references for Centers for Disease Control, Field Triage Decision Scheme: The National Trauma Triage Protocol.

Air Medical (Supplemental 10min.)

Emphasize patient transfer issues, Interaction with AM personnel, Scene safety, LZ selection and prep.

Vehicle Extrication (No transitional material)

However; Material on situational safety has been added.

Hazardous Materials Awareness (No transitional material)

However; HAZWOPER standard has been added.

Mass Casualty Incidents Due to Terrorism & Disaster

(Essential content 20min.)

All new content. Provide a detailed discussion of the risks & responsibilities of operating on the scene of a natural or man-made disaster.

Total Summary of proposed time for planning purposes: Essential content = 10.25 hrs. Supplemental = 3.25 hrs.

For a current EMT-Basic (based on 1994 EMT-B National Standard Curriculum) transitioning to 2009 Emergency Medical Technician (EMT), the following skills are **no longer taught**:

- Insertion of nasogastric and orogastric tubes
- Activated charcoal

The following restraint technique has been determined to be harmful and is no longer permitted: forceful restraint in a prone position, with wrists & ankles tightly tied together ("hobbled") behind the back.

#### **Skill Considerations:**

- Use of oxygen humidifiers,
- use of partial rebreather,
- simple face, and Venturi masks,
- obtaining a pulse oximetry value,
- use of automated transport ventilators,
- use of mechanical CPR devices (requires additional specialty training and device approval),
- > assisting a patient with his/her prescribed medications,
- administration of aspirin by mouth, use of an auto-injector (self or peer).